

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the above-identified application.

Listing of Claim

1. (Currently Amended) A computer program product, encoded in computer readable media, the computer program product for designing an integrated circuit chip, comprising:

a first set of instructions, executable on a computer system, the first set of instructions configured to model an input/output cell located on ~~the~~ a perimeter of an integrated circuit, the model of the input/output cell ~~further~~ comprising:

a model of a main cell; and

a model of a pre-cell; and

a second set of instructions, executable on a the computer system, the second set of instructions configured to model a cover wherein the cover prevents an area occupied by the pre-cell from being used for any other purpose ~~in the model~~.

2. (Currently Amended) The computer program product as recited in claim 1, further comprising:

a third set of instructions, executable on a the computer system, the third set of instructions configured to adjust ~~the~~ signal timing of the main-cell and pre-cell models, wherein the signal timing adjustment to the main cell and pre-cell models approximates ~~the~~ a signal timing of a the input/output cell.

3. (Currently Amended) The computer program product as recited in claim 1, ~~wherein the first cover is used to cover a first pre-cell, further comprising:~~

~~a second pre-cell, wherein a single the model of input/output cell is modeled with~~

~~a main cell, a first pre-cell and comprises a second pre-cell;~~

~~wherein the first cover prevents use of the area of the first pre-cell and the second cover prevents use of the area covered by the second pre-cell wherein the~~

second set of instructions are configured to model a second cover, wherein the second cover prevents an area occupied by the second pre-cell from being used for any other purpose.

4. (Original) The computer program product as recited in claim 1, the computer program product further comprising:

a database, wherein the database stores a netlist.

5. (Currently Amended) The computer program product as recited in claim 1, the computer program product further comprising:

a third set of instructions, executable on the computer system, the third set of instructions configured to convert a netlist to a proprietary format.

6. (Currently Amended) The computer program product as recited in claim 1, further comprising:

a third set of instructions, executable on the computer system, the third set of instructions configured to flatten a netlist by reading a description of ~~the~~ a function of a cell and listing each function of the cell individually, ~~wherein reading a description of the function of a cell and listing each function of the cell individually.~~

7. (Currently Amended) The computer program product as recited in claim 1, further comprising:

a third set of instructions, executable on the computer system, the third set of instructions configured to identify ~~the~~ a location of each pin in an integrated circuit.

8. (Currently Amended) The computer program product as recited in claim 1, further comprising:

a third set of instructions, executable on the computer system, the third set of instructions configured to identify ~~the~~ a location of each cell in an integrated circuit.

9. (Currently Amended) A method of ~~designing an integrated circuit, the method to model~~ modeling an input/output cell ~~in a location on the~~ a perimeter of ~~the~~ an integrated circuit and at a location in ~~the~~ a core area of the integrated circuit, the method comprising:

modeling ~~an~~ the input/output cell ~~located on the perimeter of an integrated circuit,~~

wherein ~~modeling~~ the input/output cell model further comprises:

modeling a model of a main cell; and

modeling a model of a pre-cell; and

modeling a cover wherein the cover prevents an area designated to be occupied by the model of the pre-cell from being used for any other purpose ~~in the~~ model.

10. (Original) An integrated circuit manufactured by the method as recited in claim 9.

11. (Currently Amended) The method as recited in claim 9, further comprising:

adjusting ~~the~~ a signal timing of the main-cell and pre-cell models, ~~adjusting so that the~~ signal timing of the main cell and the pre-cell models approximates ~~the~~ a signal timing of a input/output cell.

12. (Currently Amended) The method as recited in claim 9, further comprising:

modeling a second cover;

~~modeling the input/output cell with a main cell, a first pre-cell and~~ wherein the input/output cell comprises a second pre-cell model, wherein the first cover prevents use of the area of the first pre-cell and the second cover prevents use of the area covered by the second pre-cell;

wherein the second cover prevents an area designated to be occupied by the model of the second pre-cell from being used for any other purpose.

13. (Original) The method as recited in claim 9, further comprising:

storing a netlist.

14. (Original) The method as recited in claim 9, further comprising:
converting a netlist to a proprietary format.
15. (Original) The method as recited in claim 9, further comprising:
listing each function of a cell individually.
16. (Currently Amended) The method as recited in claim 9, further comprising:
identifying ~~the~~ a location of each pin in ~~an~~ the integrated circuit.
17. (Currently Amended) The method as recited in claim 9, further comprising:
identifying ~~the~~ a location of each cell in ~~an~~ the integrated circuit.
18. (Currently Amended) A computer system, comprising:
a memory; and
a central processing unit, wherein the central processing unit is designed ~~with the assistance of to execute instructions of~~ a computer program, ~~the computer program encoded in computer readable media~~ stored in the memory, the computer program ~~product~~ comprising:
a first set of instructions, ~~stored in said memory~~, configured to model an input/output cell located on ~~the~~ a perimeter of an integrated circuit; the model of the input/output cell ~~further~~ comprising:
a model of a main cell; and
a model of a first pre-cell; and
a second set of instructions, ~~stored in the memory~~, configured to model a cover wherein the cover prevents ~~the~~ an area occupied by the first pre-cell from being used for any other purpose ~~in the model~~.

19. (Currently Amended) The computer system as recited in claim 18, ~~further comprising~~
wherein the computer program further comprises:

a third set of instructions, ~~executable on a computer system~~ configured to adjust ~~the a~~
signal timing of the main-cell and pre-cell models, ~~wherein so that the signal~~
timing ~~adjustment to~~ of the main cell and first pre-cell models approximates ~~the a~~
signal timing of a the input/output cell.

20. (Currently Amended) The computer system as recited in claim 18, ~~further comprising~~
wherein the computer program further comprises:

a third set of instructions, ~~executable on a computer system~~ configured to model a second
cover;

wherein the input/output cell comprises a model a second pre-cell; and model a second
cover;

wherein the ~~first~~ second cover prevents use of ~~the an~~ area ~~of the first pre-cell and the~~
~~second cover prevents use of the area covered by the~~ occupied by the second pre-
cell from being used for any other purpose.

21. (Original) The computer system as recited in claim 18, further comprising:

a database, wherein the database stores a netlist.

22. (Currently Amended) The computer system as recited in claim 18, ~~further comprising~~
wherein the computer program further comprises:

a third set of instructions, the third set of instructions configured to convert a netlist to a
proprietary format.

23. (Currently Amended) The computer system as recited in claim 18, ~~further comprising~~
wherein the computer program further comprises:

a third set of instructions, the third set of instructions configured to read a description of
~~the a~~ function of a cell and list each function of the cell individually, wherein
reading a the description of the function of a the cell and listing each function of
the cell individually is referred to as flattening a netlist.